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April 9, 2007

Mr. Ted Cheatham  
Executive Director  
West Virginia Public Employees Insurance  
State Capitol Complex  
Building 5, Room 1001  
1900 Kanawha Boulevard, East  
Charleston, WV 25305

Dear Ted,

CCRC Actuaries, LLC ("CCRC Actuaries") was engaged by the Public Employees Insurance Agency ("PEIA") on behalf of the WV Retiree Health Benefits Trust Fund Finance Board to revise the unfunded initial liability and the normal cost information for active employee and retiree health care and life insurance liabilities for Other Postemployment Benefits ("OPEB") for the participating employers of the West Virginia defined benefit cost sharing multi-employer plans. This project was jointly managed by PEIA and the State's Financial Accounting and Reporting Section in the Department of Administration. These calculations include the OPEB liability of state agencies, state colleges and universities, West Virginia county school boards and non-state employers, as of June 30, 2007. This letter updates the prior analysis contained in the report dated June 30, 2006 that presented the liability as of June 30, 2005.

For the current OPEB calculations, we used data from the March 2007 billing file provided by PEIA. For the analysis of the current liability of the Sick and Annual Leave ("SAL") Program, a subset of OPEB, we used data provided by the Department of Administration through June 30, 2006 and forecast it forward through June 30, 2007.

### **Background**

GASB 43 and 45 address the liabilities associated with the rising cost of health care. Health costs continue to grow faster than national income and, despite research indicating that the employees get good value for the increased spending, it is questionable whether governments and private employers can continue to finance the current benefit levels.

In addition to the retiree health care liability, CCRC Actuaries performed an analysis of the current liability of the SAL Program, a subset of OPEB, offered to public employees of the State as of June 30, 2005. OPEB plans are subject to compliance requirements as described in Statements 43 and 45 of the Governmental Accounting Standards Board ("GASB"). The SAL analysis was conducted for employees covered under the Public Employees Retirement System ("PERS"), Teachers Retirement System ("TRS"), Teachers Defined Contribution Plan ("TDC"), West Virginia Death, Disability and Retirement Fund ("Plan A") and West Virginia State Police Retirement System ("Plan B").

In addition to pensions, many state and local governmental employers provide OPEB as part of the total compensation offered to attract and retain the services of qualified employees. OPEB includes postemployment healthcare as well as other forms of postemployment benefits such as life insurance. From an accrual accounting perspective, the cost of OPEB, like the cost of pension benefits, generally should be associated with the periods in which the exchange occurs, rather than with the periods when benefits are paid or provided. However, in current practice, most OPEB plans are financed on a pay-as-you-go basis, and financial statements generally do not report the financial effects of OPEB earned by the employees but not yet paid. As a result, current financial reporting generally fails to:

- Recognize the cost of benefits in periods when the related services are received by the employer.
- Provide information about the actuarial accrued liabilities for promised benefits associated with past services and whether, and to what extent, those benefits have been funded.
- Provide information useful in assessing potential demands on the employer's future cash flow.

GASB 43 and GASB 45 improve the relevance and usefulness of financial reporting by requiring systematic, accrual-basis measurement and recognition of OPEB cost over a period that approximates employees' years of service and providing information about actuarial accrued liabilities associated with OPEB and whether and to what extent progress is being made in funding the plan.

Under GASB 43 and GASB 45, the **Actuarial Accrued Liability ("AAL")** is that portion as determined by a particular Actuarial Cost Method of the Actuarial Present Value of OPEB benefits and expenses that is not provided for by future Normal Costs.

The **Unfunded Actuarial Accrued Liability ("UAAL")** is the excess of the present value of future benefit costs exclusive of future normal cost as of the valuation date over the present value of plan assets. The current unaccounted for UAAL needs to be amortized over a period not to exceed 30 years. We have assumed this liability is amortized over 30 years.

The **Normal Cost** is that portion of the Actuarial Present Value of OPEB benefits and expenses which is allocated to a particular year by the Actuarial Cost Method.

To calculate the AAL, for each current employee and retiree, the **Net Present Value ("NPV")** of benefits at retirement is calculated from the time of employment. Utilizing the assumed payroll growth rate and interest earnings rate, an assumed contribution in the first year of employment is calculated such that over time, contributions and investment earnings will fund the benefits at retirement. Each subsequent year, the assumed contribution is this initial contribution inflated by the payroll growth rate.

## **Scenarios**

The liability for the OPEB and the Sick and Annual Leave Calculation was developed under a baseline assumption and a scenario assuming that Medicare retirees eligible are transferred to a MAPD plan effective July 1, 2007. The baseline scenario assumes that PEIA will continue to participate in CMS' Retiree Drug Subsidy Program under Medicare Part D, and assumes that PEIA remains at risk for all Medicare retirees as a secondary payor.

MAPD is a Medicare Advantage/Prescription Drug plan. This is a plan that's licensed by the federal government through the Centers for Medicare and Medicaid Services (CMS). This plan will provide both medical and prescription drug benefits to Medicare-eligible retirees through a fee-for-service plan. CMS pays the MAPD plan to provide coverage for Medicare members, and the MAPD takes full responsibility for paying for benefits for the member. PEIA will pay a capitated rate of \$198 per member per month ("PMPM") for all Retiree Assistance Program retirees and \$114 PMPM for all other retirees. PEIA will retain all retiree premiums.

## **Assumptions**

The scenarios utilized retirement, withdrawal, mortality and wage-based assumptions currently utilized in the valuation of the various defined benefit plans administered by the Consolidated Public Retirement Board ("CPRB"). The benefit liability for CPRB is currently calculated using a 7.5% investment rate to discount the liabilities. In order to provide a range of results, the State of West Virginia asked us to provide results using a 4.5% investment rate.

## **June 30, 2007 Valuation**

The charts below summarize the OPEB liability and **Annual Required Contribution ("ARC")** as defined by GASB 43 and GASB 45 for the trend assumptions under the baseline and MAPD scenarios with an investment rate assumption of 4.5%. The lower the investment rate assumption, the higher the liability. The investment rate assumption needs to relate to the expected return on assets. If the trust is 100% funded, the 7.5% investment rate assumption is reasonable. If the current system of pay-as-you-go funding is continued and West Virginia does not fund the ARC, a lower investment rate assumption will be necessitated. We recommend that the management team consult with investment and accounting sources to determine the appropriate rate based on current and evolving financing plans for the OPEB.

<b>Total OPEB Liability (in thousands)</b>		
	<b><u>Baseline</u></b>	<b><u>MAPD</u></b>
Unfunded Actuarial Accrued Liability	\$7,761,200	\$3,362,635
FY2008 Amortization of UAAL	277,229	130,435
<u>FY2008 Normal Cost</u>	546,995	<u>267,540</u>
Total FY2008 ARC	824,224	397,975
<u>Pay-as-you-go expenses</u>	<u>133,351</u>	<u>59,768</u>
Incremental FY 2008 Cash Outlay for 100% Funding	\$690,873	\$338,207

The liability detailed on the previous page includes all covered employees and retirees, while not all employees are paid from the State's general fund. The incremental cash outlay for 100% funding would need to be adjusted by the employees and retirees from local agencies to develop the cash outlay requirements from the general fund of the State.

The new regulations do not require any employer funding and allows the State to continue the current practice of pay-as-you-go financing of retiree health benefits, however the recognition of the cost of future retiree health benefits will accumulate on the State's financial statements if assets have not been set aside to offset the liability.

The OPEB liability varies significantly from state to state. It is difficult to compare states actual liability due to differences in actuarial assumptions. Iowa and Mississippi offer little or no coverage, while Montana and Wisconsin offer insurance, but require retirees to pay most of the cost. Ohio has over 50% funding of its approximately \$20 billion liability. Virginia has only a \$1 billion liability, while Maryland's is projected to be \$20 billion.

The rating agencies Standard & Poor, Moody and Fitch have all issued reports related to GASB 43 and GASB 45. The rating agencies will consider the funded ratio, the reasonableness of actuarial assumptions, the size of the ARC relative to the overall budget, whether the net obligation is increasing, policies that have been developed to manage the ARC, the percentage of the ARC that is being funded, and the flexibility to reduce or eliminate benefits.

Please review this information and we look forward to working with you on this very important issue facing the State of West Virginia.

Sincerely yours,



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# **Actuarial Assumptions**

## **OPEB Key Assumptions**

### **1. Actuarial Cost Methods**

The State of West Virginia currently employs the Entry Age Actuarial Cost Method in its other defined benefit pension valuations, and this methodology will be used in the OPEB valuation. Under this methodology the Actuarial Present Value of the Projected Benefits of each individual included is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of the Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of the Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

### **2. Actuarial Assumptions**

The GASB 43 and GASB 45 require that the selection of actuarial assumptions be guided by standards of the actuarial profession. Assumptions should be placed on expected long-term future trends. It is our assumption that we will use information and assumptions currently incorporated by the Consolidated Public Retirement Board.

### **3. Retirement Assumptions**

Retirement assumptions in the valuation were provided from the various defined benefit plans administered by the Consolidated Public Retirement Board ("CPRB").

### **4. Mortality, Voluntary Withdrawal, and Future Salary Assumptions**

Mortality, withdrawal and wage-based assumptions in the valuation were provided from the various defined benefit plans administered by the CPRB.

### **5. Payroll Growth Rates**

Payroll growth rates vary by plan. For PERS, assumed compensation increases range from 4.6% to 5.6%. For TRS/TDC, assumed compensation increases range from 3.7% to 5.7%. For Troopers Plan A and B, compensation is assumed to increase 5.7% per year for the first 10 years of service, and 5% per year thereafter.

### **6. Investment or Discount Rate Assumptions**

An unfunded 4.5% rate was utilized for the OPEB liability.

## 7. Healthcare Cost Trend Rate

The healthcare cost trend rate is the rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological services.

Both scenarios used the following assumptions:

<b>Retiree Trend Assumptions</b>						
	<b>Medical</b>		<b>Drugs</b>		<b>Admin</b>	<b>Total</b>
	<b>Medicare</b>	<b>Non-Medicare</b>	<b>Medicare</b>	<b>Non-Medicare</b>		
<b>2008</b>	6.0%	6.5%	12.0%	12.0%	4.0%	9.3%
<b>2009</b>	6.0%	6.5%	12.0%	12.0%	4.0%	9.9%
<b>2010</b>	6.5%	7.0%	12.5%	12.5%	4.0%	10.4%
<b>2011</b>	7.0%	7.5%	13.0%	13.0%	4.0%	11.0%
<b>2012</b>	7.5%	8.0%	13.5%	13.5%	4.0%	11.6%
<b>2013</b>	8.0%	8.5%	14.0%	14.0%	4.0%	10.9%
<b>2014</b>	7.5%	8.0%	13.0%	13.0%	4.0%	10.1%
<b>2015</b>	7.0%	7.5%	12.0%	12.0%	4.0%	9.4%
<b>2016</b>	6.5%	7.0%	11.0%	11.0%	4.0%	8.6%
<b>2017</b>	6.0%	6.5%	10.0%	10.0%	4.0%	7.9%
<b>2018</b>	6.0%	6.0%	9.0%	9.0%	4.0%	7.3%
<b>2019</b>	6.0%	6.0%	8.0%	8.0%	4.0%	6.6%
<b>2020</b>	6.0%	6.0%	7.0%	7.0%	4.0%	6.0%
<b>2021</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2022</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2023</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2024</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2025</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2026</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%
<b>2027</b>	6.0%	6.0%	6.0%	6.0%	4.0%	6.0%

*The total composite rate in 2026 was assumed for years 2027 and after.*

## 8. Retiree Premium Inflation Assumptions

The premium inflation rate was developed based on the yearly overall claim cost trend.

## 9. Probability of Active Employee Choosing Healthcare at Retirement

For purposes of this calculation we have assumed that 15% of life only actives choose retiree medical coverage and 70% of medical actives choose retiree medical coverage.

**10. Probability of a new retiree choosing the healthcare premium waiver over annuity increases offered as an option**

We utilized the same methodology as employed in previous years that bases the decision on the present value of the health care benefit versus the present value of the annuity benefit.

**11. Accrual of Future Benefits**

The SAL liability is calculated using two different approaches: The first approach calculates the liability based on the amount of Sick and Annual Leave accrued as of June 30, 2005, assuming **no further** accumulations of sick time. The second approach calculates the liability based under the assumption that the employee will **continue** to accrue Sick and Annual Leave based on the employee's history of accumulating sick leave time.

For the retiree subsidy analysis, we assume no new active employees in the projection. The employees and retirees as of June 30, 2005 make up the future retirees and the corresponding liability.

**12. Plan A vs. Plan B Coverage for Non-Medicare Retirees**

The calculation will assume that an employee with Plan A or Plan B coverage will elect the same level of plan coverage at retirement.

**13. Retiree Policy Costs**

The retiree policy costs were developed from audited FY 2005 results. The 2008 cost assumptions are as follows:

	<b>Baseline</b>		<b>MAPD</b>	
	<b><u>Females</u></b>	<b><u>Males</u></b>	<b><u>Females</u></b>	<b><u>Males</u></b>
25 & Under	\$1,656	\$1,619	\$1,656	\$1,619
30	5,257	3,903	5,257	3,903
40	4,757	4,251	4,757	4,251
50	4,937	5,222	4,937	5,222
60	5,700	5,183	5,700	5,183
61	5,785	5,185	5,785	5,185
70	3,653	3,511	1,557	1,557
80	4,014	3,842	1,557	1,557
90	3,931	3,842	1,557	1,557
100	3,440	3,828	1,557	1,557
105 & Over	3,194	3,821	1,557	1,557

#### 14. Medical Premiums

For the purposes of the projection of program costs, we have assumed that the cost of retiree monthly premiums in Fiscal Year 2007 will be based on the current rates as illustrated in the chart below and adjusted for anticipated Medicare premium reductions assumptions effective July 1, 2007.

**Fiscal Year 2007 Non-Medicare Monthly Premium Rates**

Years of Service	Policyholder Only		Policyholder with Non-Medicare Dependents		Policyholder with Medicare Dependents	
	Standard	Preferred	Standard	Preferred	Standard	Preferred
0 to 4	\$919	\$904	\$2,214	\$ 2,184	\$1,576	\$1,546
5 to 9	744	729	1,772	1,742	1,256	1,226
10 to 14	570	555	1,329	1,299	934	904
15 to 19	395	380	888	858	615	585
20 to 24	292	277	623	593	422	392
25 and Over	223	208	446	416	293	263

**Fiscal Year 2007 Medicare Monthly Premium Rates**

Years of Service	Policyholder Only		Policyholder with Non-Medicare Dependents		Policyholder with Medicare Dependents	
	Standard	Preferred	Standard	Preferred	Standard	Preferred
0 to 4	\$453	\$438	\$1,472	\$ 1,442	\$945	\$915
5 to 9	361	346	1,178	1,148	746	716
10 to 14	268	253	886	856	545	515
15 to 19	175	160	594	564	345	315
20 to 24	120	105	418	388	222	192
25 and Over	83	68	301	271	143	113